Figure 13: Alignment of SEQ ID NO: 2 with Swiss Prot database

	1 50
Q9JZ47	MSSNKASFFTRL
Q9JU41	MSSNKASFFTRL
Q59601	MSSNKASFFTRL
Q9HW50	MARLRLLLRSARL
SEQ ID NO: 2	MSAWTRAKTAVGL
035259	METIMDDEVTKRTSAEELESWNLLSRTNYNFQYISLRLTILWGLGVLIRY
	51 100
Q9JZ47	RRLCRLAVWLFKTGKNLRGIDGG.CPESRNRAVIELGRGVLAALD
Q9JU41	RRLCRLTVWLFKTGKNLRGIDGG.CPESRNRAVIELGRGVLAALD
Q59601	RRLCRLTVWLFKTGKNLRGIDGG.CPKSRNRAVIALGKGALAALD
Q9HW50	LGLVALGLGLAAWVSLRERLPGADVTPLRQRLTRWWLARLCAALP
SEQ ID NO: 2	LTLAPARIVFLVTVLGTYGLTVAACTRLGVPKSFVLGLTRCVARLTLWGL
035259	CFLLPLRIALAFTGIGLLVVGTTMVGYLPNGRFKEFLSKHVHLMCYRICV
	101 150
Q9JZ47	IGLEVGRPAPEHPNGVLVAANHVSWLDIFAMS.AVYPSSFIAKQEI
Q9JU41	IGLEVGRPAPEHPNGVLVAANHVSWLDIFAMS.AVYPSSFIAKQEI
Q59601	IGLEVGRPAPEHPNGVLVAANHVSWLDIFAMS.AVYPSSFIAKQEI
Q9HW50	FEVRVSGEAPRQPMLWVANHVSWTDIPLLG.ALAPLTFLSKAEV
SEQ ID NO: 2	GFYHIEVSCDAQGLREWP.RVIVANHVSYLEILYFMSTVHCPSFVMKKTC
035259	RALTAIITYHNRKNRPRNGGICVANHTSRIDVIIFASDGYYAMVGQVHGG
	151 200
Q9JZ47	${\tt KSWPVLGKMGQNAGTVFINRNSRRDIEPINRAVCETLQRGQ}$
Q9JU41	KSWPVLGKMGQNAGTVFINRNSRRDIEPINRAVCETLQRGQ
Q59601	KSWPVLGKMGQNAGTVFINRNSRRDIEPINRAVCETLQRGQ
Q9HW50	RAWPLAGWLAEKAGTLFIRRGSGDSRLINQRLAEQLHRGR
SEQ ID NO: 2	LRVPLVGYIAMELGGVIVDREGGGQSASAIIRDRVQEPPRDSSSEKHHAQ
035259	LMGVIQRAMVKACPHVWFERSEVKDRHLVAKRLTEHVQDKS
	201 250
Q9JZ47	$ {\tt NVSFFPEARTSSGLGLLPFKAALFQSAIDAGAKVLAVALRYYDETGKR}$
Q9JU41	$ {\tt NVSFFPEARTSSGLGLLPFKAALFQSAIDAGAKVLAVALRYYDETGKR}$
Q59601	$ {\tt NVSFFPEARTSSGLGLLPFKAALFQSAIDAGAKVLAVALRYYDETGKR}$
Q9HW50	$ {\tt NLLIFPEGTTTNGESLRTFHGRLMASALEAGVAVQPVAISYRRDGVPD}$
SEQ ID NO: 2	$\verb pllvfpegtttngscllqfktgafrpg.apvlpvvlefpidkarg $
035259	KLPILIFPEGTCINNTSVMMFKKGSFEIGATVYPVAIKYDPQFG

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Figure 13 (continued)

	251	300
Q9JZ47	TARPSYADVGLPTCLWRIVSMKKLTIRVDFVCVADAAE	
Q9JU41	TARPSYADVGLPTCLWRIVSMKKLTIKVDFVCVADAAE	
Q59601	TARPSYADVGLPTCLWRIVSMKKLTIKVDFVCVADAAE	
Q9HW50	AQAPFIGDDDLLSHLGRLLRGERGSVHIQLLEPIPSQ	
SEQ ID NO: 2	2 DFSPAYESVHTPAHLLRMLAQWRHRLRVRYLPLYEPSAAEKVDADLY	'ARN
035259	DAFWNSSKYGMVTYLLRMMTSWAIVCSVWYLPPMTRE	
	301	349
Q9JZ47	SEDRYALKDKIEESIRAVVADDADIAV	
Q9JU41	SEDRYALKDKIEESIRAVVADDADIAV	
Q59601	SEDRYALKDKIEESIRAVVADDADIAV	
Q9HW50	GLDRAELARQAQQAVRLALFGTAAPTQTRRAA	
SEQ ID NO: 2	VRDEMARALKVPTVEQSYRDKLVYHADLMPHYQKAGPGALYLYVRPI)LL
035259	KDEDAVQFANRVKSAIARQEDW	

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Figure 14: Alignment of SEQ ID NO: 5 with Swiss Prot database

		1 50
Q9C9P8		MEVCGDLKSDNLKNRPLTPLRILRGLMILLVFLSTAFMFLLYFAPIAALG
Q9SFJ1		MEVCGDLKSDNLKNRPLTPLRILRGLMILLVFLSTAFMFLLYFAPIAALG
Q9LHN4		MEKKSVPNSDKLSLIRVLRGIICLMVLVSTAFMMLIFWGFLSAVV
SEQ ID NO:	5	
O9SDN3		
Q9XFW4		
2		<u> </u>
		51 100
Q9C9P8		LRLLSVQQSRKVVSLIFGLWLALWPYLFETVNGTTVVFSGDIIPVEK
Q9SFJ1		LRLLSVOOSRKVVSLIFGLWLALWPYLFETVNGTTVVFSGDIIPVEK
O9LHN4		LRLFSIRYSRKCVSFFFGSWLALWPFLFEKINKTKVIFSGDKVPCED
SEO ID NO:	5	MDVVKVIFAGDKVPKEN
Q9SDN3		MGKE
O9XFW4		RPMSKNTYRKINRVVAETLWLELVWIVDWWAGVKIQVFADDETFNRMGKE

		101 150
Q9C9P8		RVLLIANHRTEVDWMYLWNIALRKGCLGYIKYVLKSSLMKLPIFGWGFHV
O9SFJ1		RVLLIANHRTEVDWMYLWNIALRKGCLGYIKYVLKSSLMKLPIFGWGFHV
Q9LHN4		RVLLIANHRTEVDWMYFWDLALRKGQIGNIKYVLKSSLMKLPLFGWAFHL
SEQ ID NO:	5	RVMVMCNHRTEVDWMYIWNLAIRKGKIGYCKYAVKNSVKNLPLFGWAFYV
O9SDN3		HALVISNHRSDIDWLVGWVLAQRSGCLGSSLAVMKKSSKFLPVIGWSMWF
O9XFW4		HALVVCNHRSDIDWLVGWILAQRSGCLGSALAVMKKSSKFLPVIGWSMWF
_		
		151 200
Q9C9P8		LEFIPVERKREVDEPVLLQMLSSFKDPQEPLWLALFPEGTDFTEEKCKRS
Q9SFJ1		LEFIPVERKREVDEPVLLQMLSSFKDPQEPLWLALFPEGTDFTEEKCKRS
Q9LHN4		FEFIPVERRWEVDEANLRQIVSSFKDPRDALWLALFPEGTDYTEAKCQRS
SEQ ID NO:	5	FEFLMLHRKWEVDAPVIKTYIDSFQDKRDPLWLVVFPEGTDFSEAKRDTG
Q9SDN3		SEYLFLERSWAKDEGTLKSGVQRLKDFPQPFWLALFVEGTRFTQAKLLAA
Q9XFW4		SEYLFLERNWAKDESTLQSGLQRLNDFPRPFWLALFVEGTRFTEAKLKAA
		201 250
Q9C9P8		${\tt QKFAAEVGLPALSNVLLPKTRGFGVCLEVLHNSLDAVYDLTIAYKPRCP.}$
Q9SFJ1		${\tt QKFAAEVGLPALSNVLLPKTRGFGVCLEVLHNSLDAVYDLTIAYKPRCP.}$
Q9LHN4		${\tt KKFAAENGLPILNNVLLPRTKGFVSCLQELSCSLDAVYDVTIGYKTRCP}.$
SEQ ID NO:	5	${\tt NAIGREKGYPELVNVLQPRTRGFVTCLSQSRCSLDAVYDLTIGYKKRCP}.$
Q9SDN3		${\tt QEYAAATGLPVPRNVLIPRTKGFVTAVSQMRSFAPAIYDVTVAIPKSSPA}$
Q9XFW4		QEYAASSELPVPRNVLIPRTKGFVSAVSNMRSFVPAIYDMTVAIPKTSPP

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Figure 14 (continued)

	251 300
Q9C9P8	${\tt SFMDNVFGTDPSEVHIHVRRVLLKEIPANEAESSAWLMDSFKLKDKLLSD}$
Q9SFJ1	${\tt SFMDNVFGTDPSEVHIHVRRVLLKEIPANEAESSAWLMDSFKLKDKLLSD}$
Q9LHN4	SFLDNVYGIEPSEVHIHIRRINLTQIPNQEKDINAWLMNTFQLKDQLLND
SEQ ID NO: 5	LFINNVFGTDPSEVHIHIRRIPISEIPQSEDGMTQWLYDLFYQKDQMLAS
Q9SDN3	PTMLRLFEGRPSVVHVHIKRHVMRDLPETDEAVAQWCKDIFVAKDALLDK
Q9XFW4	PTMLRLFKGQPSVVHVHIKCHSMKDLPEPEDEIAQWCRDQFVAKDALLDK
	301 350
Q9C9P8	FNAQGKFPNQRPEEELSVLKCIATFAGKQQQVTKPSCQKVFLLLNQSSDE
Q9SFJ1	FNAQGKFPNQRPEEELSVLKCIATFAGKQQQVTKPSCQKVFLLLNQSSDE
Q9LHN4	FYSNGHFPNEGTEKEFNTKKYLINCLAVIAFTTICTHLTFFSSMIWFRIY
SEQ ID NO: 5	FSKTGSFPDSGIE.ESPLNIVEGVCNVALHVVLSGWVFWCLFHSVWLKLY
Q9SDN3	${\tt HTVEQTFGDQQLKVTGRPLKSLLVVTAWACLLILGALKFLYWSSLLSSWK}$
Q9XFW4	HIAADTFPGQKEQNIGRPIKSLAVVVSWACLLTLGAMKFLHWSNLFSSWK
	351 400
Q9C9P8	351 400 KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE
Q9C9P8 Q9SFJ1	331
	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE
Q9SFJ1	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE
Q9SFJ1 Q9LHN4	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK
Q9SFJ1 Q9LHN4 SEQ ID NO: 5	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3 Q9XFW4	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV GIAFSALGLGVVTVLMQILIRFSQSERSTPAPVAPTNNKNKGESSGKPEK GIALSAFGLGIITLCMQILIRSSQSERSTPAKVAPAKPKDNHQSGPSSQT
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3 Q9XFW4	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV GIAFSALGLGVVTVLMQILIRFSQSERSTPAPVAPTNNKNKGESSGKPEK GIALSAFGLGIITLCMQILIRSSQSERSTPAKVAPAKPKDNHQSGPSSQT
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3 Q9XFW4 Q9C9P8 Q9SFJ1	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV GIAFSALGLGVVTVLMQILIRFSQSERSTPAPVAPTNNKNKGESSGKPEK GIALSAFGLGIITLCMQILIRSSQSERSTPAKVAPAKPKDNHQSGPSSQT
Q9SFJ1 Q9LHN4 SEQ ID NO: 5 Q9SDN3 Q9XFW4 Q9C9P8 Q9SFJ1 Q9LHN4	KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE KESKKAVAQHPFTDTLDHLFQVEHSISCFLYMHIYNLSTCHLISLYE VSLACVYLTSATHFNLRSVPLVETAKNSLKLVNK VAFASLLLAFSTYFDWRPKPVYSSLRTKRKIV GIAFSALGLGVVTVLMQILIRFSQSERSTPAPVAPTNNKNKGESSGKPEK GIALSAFGLGIITLCMQILIRSSQSERSTPAKVAPAKPKDNHQSGPSSQT

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Figure 15: Alignment of SEQ ID NO: 35 with Swiss Prot database

	1 50
P04180	MGP
Q08758	MGP
Q9MZ04	MGL
Q9DDJ6	MGR
O9Y2B3	MGL
SEQ ID NO: 35	MCSISCGSTPQQLCHYRKSGELITRKSRAAIRWWRYGQQCKVLLPLDLIR
~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	51 100
P04180	PGSPWQWVTLLLGLLLPPAAPFWLLNVLFPPHTTPK
Q08758	PGSPWQWVPLLLGLLLPPAAPFWLLNVLFPPHTTPK
Q9MZ04	PGSPWQWVLLLLELLLPTAAPFWLLNVLFPPHTTPK
Q9DDJ6	TGAGFALLTLLLLLPQPASQFWLFNVLFPPTSTPE
Q9Y2B3	HLRPYRVGLLPDGLLFLLLLLMLLADPALP
SEQ ID NO: 35	SSSQFFIVVLTLTLFLFTTCGAVHTAAQDRSFATLSQRSRASLFSVGRAQ
	101 150
P04180	AELSNHTRPVILVPGCLGNQLEAKLDKPDVVN.WMCYRKTEDFFTIWLDL
Q08758	AELSNHTRPVILVPGCLGNQLEAKLDKPDVVN.WMCYRKTEDFFTIWLDL
Q9MZ04	AELSNHTRPVILVPGCLGNQLEAKLDKPDVVN.WMCYRKTEDFFTIWLDL
Q9DDJ6	APPTNSTPPVVLVPGCLGNQLEAKLDKPDVVN.WMCYRKTEDYFTIWLNL
Q9Y2B3	AGRHPPVVLVPGDLGNQLEAKLDKPTVVH.YLCSKKTESYFTIWLNL
SEQ ID NO: 35	ARNKHHLAPVVIVPGTGGNQLEARLTADYEANKPWCYSFRKDYFRLWLDV
	151 200
P04180	${\tt NMFLPLGVDCWIDNTRVVYNRSSGLVSNAPGVQIRVPGFGKTYSVEYLDS}$
Q08758	${\tt NMFLPLGVDCWIDNTRVVYNRSSGLVSNAPGVQIRVPGFGKTYSVEYLDS}$
Q9MZ04	${\tt NMFLPLGVDCWIDNTRVTYNHSSGRVSNAPGVQIRVPGFGKTYPVEYLDN}$
Q9DDJ6	${\tt NTFLPVGVDCWIDNTRVVYNRTSRKMSNAPGVHIRVPGFGKTYSVEYLDQ}$
Q9Y2B3	${\tt ELLLPVIIDCWIDNIRLVYNKTSRATQFPDGVDVRVPGFGKTFSLEFLDP}$
SEQ ID NO: 35	$\tt KTLFPPFTTCFADRLSLDYNPQSDAYSNIKGVKTRVPFFGTTEGMEYLDP$
	201 250
P04180	${\tt SKLAGYLHTLVQNLVNNGYVRDETVRAAPYDWRLEPGQQEEYY}$
Q08758	SKLAGYLHTLVQNLVNNGYVRDETVRAAPYDWRLEPGQQEEYY
Q9MZ04	${\tt SKLAGYMHTLVQNLVNNGYVRDETVRAAPYDWRLGPKQQEEYY}$
Q9DDJ6	${\tt SKLAGYLHTLVQNLVNNGYVRDQTVRAAPYDWRVGPQEQPEYF}$
Q9Y2B3	${\tt SKSSVGSYFHTMVESLVGWGYTRGEDVRGAPYDWRRAPNENGPYF}$
SEQ ID NO: 35	${\tt SLKFLTGYMIHLVNALKAHGYENGKSLYGAPYDFRFAPGPHASNVALEYL}$

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i igalo lo (oolidilaca)	Figure	15	(continued)
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94.6 .6 (66)	naoa,
	251 300
P04180	RKLAGLVEEMHAAYG.KPVFLIGHSLGCLHLLYFLLRQPQAWKDRFIDGF
Q08758	${\tt HKLAGLVEEMHAAYG.KPVFLIGHSLGCLHLLYFLLRQPQAWKDRFIDGF}$
Q9MZ04	RDLARLVEEMHATYG.KPVFLIGHSLGCLHLLHFLLHQPQSWKDRFIDGF
Q9DDJ6	QNLKALIEEMHDEYQ.QRVFLIAHSMGNLNVLYFLLQQRQAWKDQYIGGF
Q9Y2B3	LALREMIEEMYQLYG.GPVVLVAHSMGNMYTLYFLQRQPQAWKDKYIRAF
SEQ ID NO: 35	KDLKDLIETAYSVNANEPVVILAHSMGGLWTLFFLNQQSMEWRNKYVSRF
	301 350
P04180	ISLGAPWGGSIKPMLVLASGDNQGIPIMSSIKLKEEQRITTTSPWMFPSR
Q08758	ISLGAPWGGSIKPMLVLASGDNQGIPIMSSIKLKEEQRITTTSPWMFPSR
Q9MZ04	ISLGAPWGGSIKPMQVLASGDNQGIPIMSSIKLKEEQRITTTSPWMFPSS
Q9DDJ6	ISLGAPWGGSVKPLRVLASGDNQGIPLMSNIKLREEQRMTTTSPWMFPTS
Q9Y2B3	VSLGAPWGGVAKTLRVLASGDNNRIPVIGPLKIREQQRSAVSTSWLLPYN
SEQ ID NO: 35	VSVATPWGGAVEQMMTFASGNPEGVPFVNSLVVREEQRRSESNLWLLPVR
	351 400
P04180	MAWPEDHVFISTPSFNYTGRDFQRFFADLHFEEGWYMWLQ.SRDLLAGLP
008758	LAWPEDHVFISTPSFNYTGRDFQRFFADLHFEEGWYMWLQ.SRDLLAGLP
Q9MZ04	EVWPEDHVFISTPSFNYTIRDYQRFFVDVHFEEGWYMWLQ.SRDLLAGLP
Q9DDJ6	LAWPEDHIFISTPSYNYTYRDYKQFFTDVNLEDGWYMWED, MKDLLKGLP
Q9Y2B3	YTWSPEKVFVQTPTINYTLRDYRKFFQDIGFEDGWLMRQD.TEGLVEATM
SEO ID NO: 35	RCFR.DRPLVITSSRNYTAGDMEQFLCDIGFPEGVAPYKSRIPHLTDILQ
BEQ ID NO. 33	RCFR. DRFHVI IBBRRITADEMAÇI MODICI I BOVEL IRBRITADI DI
	401 450
P04180	APGVEVYCLYGVGLPTPRTYIYDHGFPYTDPVGVLYEDGDDTVATRST.E
Q08758	APGVEVYCLYGVGLPTPRTYIYDHGFPYTDPVDVLYEDGDDTVATRST.E
Q9MZ04	APGVEVYCLYGVGLPTPSTYIYDHDFPYTDPLDVLYEDGDNTVATRSM.E
Q9DDJ6	PPGVDTYCLYGTGYPTVETYIYDEHFPYEDPVDMIYGDGDDTVNRRSS.E
Q9Y2B3	${\tt PPGVQLHCLYGTGVPTPDSFYYES.FPDRDPK.ICFGDGDGTVNLKSA.L}$
SEQ ID NO: 35	${\tt PPQVPVTLIHGYGVPTAETLSYEK.KGFDNHPEITEGDGDGTVNVCSLTA}$
	451 500
P04180	LCGLWQGRQPQPVHLLPLHGIQHLNMVFSNLTLEHINAILLGAYRQGPPA
Q08758	LCGLWQGRQPQPVHLLPLRGIQHLNMVFSNQTLEHINAILLGAYRQGPPA
Q9MZ04	LCSQWQGRQPQPVHLLPLHRIQHLNMVFSNQTLEHINDILLGAYRHGNPV
Q9DDJ6	LCKRWRNQQKQKVHIQELRGIDHLNMVFSNLTLSSINEILLGSSQVGAGT
Q9Y2B3	OCOAWOSROEHOVLLOELPGSEHIEMLANATTLAYLKRVLLGP
SEQ ID NO: 35	VVEEWERVAGQELEMIALHGKQHMQILHDDHSVQVIVDAILNVTPQEQLM
	501 524
P04180	SPTASPEPPPPE
Q08758	SLTASPEPPPPE
Q9MZ04	PPAASPRPLTPE
Q9DDJ6	KEHGELGQMGALKSSLEAGRRGKN
Q9Y2B3	
SEQ ID NO: 35	FH

Figure 16: Alignment of SEQ ID NO: 23 with Swiss Prot database

	1 50
P10349	
Q9FEP9	MFILSSSSSTLPSAPPFSSTTSIFLSFSRVSLPPSSSSLK
Q39639	MFILSAVSSSSSSSSVPSSLPPFSLSPSISLSFSRVSLPPSSSSSSSSL
Q9FEQ0	MFILSSSSSLPSPLSLSSSRVSLPPPSSSSLN
Q9M4V1	MLVPSALPRVSRSVSAARFSVSGVGSSPALSSRS
SEQ ID NO: 23	MPSLFRAKRNGRRTPGNAVTN
	51 100
P10349	MAELIQDKESAQSAATAAAAS
Q9FEP9	LLPLSLQFGPPKLAS.SCSLRFSASRAMAELIQDKESAQSAATAAAAS
Q39639	KLFLPLSLHFTPPKLSSPHSFLRFSASRAMAELIQDKESAHTPSTTDVTR
Q9FEQ0	LLPLSPHFQPPNLACSCSVASRSTAELLHDFKHSAHTAASADEAR
Q9M4V1	CTSLDSSVRSSLRRCPCGIYTSRTKAVVEAVESKASAREWRSAVKRAVLA
SEQ ID NO: 23	FGKSEFHREISGSTRATTQVAEATTAGLRE
	101 150
P10349	SGYERRNEPAHSRKFLDVRSEEELLSCIKKETEAGKLPPNVAAGMEELYQ
Q9FEP9	SGYERRNEPAHSRKFLDVRSEEELLSCIKKETEAGKLPPNVAAGMEELYQ
Q39639	NDPPHSRAFLDLRSEEELLSCIRRETEAGKLPSNVAAGMEELYQ
Q9FEQ0	NHLPHSRAFLDVRSEQELLSYIRREAEAGKLPSNVAAGMEELYQ
Q9M4V1	SDTGAEEEVGHSRSFLRARSEEELLSYIRKEVETGRLSSDIANGLEELYY
SEQ ID NO: 23	TIEDRAIIDGHSHSFEGIQSEEELMQVIEKEVESGRLPKRAGAGMVELYR
	151 200
P10349	NYRNAVIESGNPKADEIVLSNMTVALDRILLDVEDPFVFSSHHKAIREPF
Q9FEP9	NYRNAVIESGNPKADEIVLSNMTVALDRILLDVEDPFVFSSHHKAIREPF
Q39639	NYKNAVFESGNPKADEIVLSNMTVALDRILLDVEDPFMFSPHHKAIREPF
Q9FEQ0	NYKNAVLKSGNPKADEIVLSNMTVALDRILLDVEEPFVFSPHHKAVREPF
Q9M4V1	${\tt NYRNAVLQSGDPRANKIILSNMAVAFDRILLDVEDPFTFSPHHQAIREPF}$
SEQ ID NO: 23	NYRDAVVSSGVENAMDIVVKVMSTVLDRILLQFEEPFTFGSHHKRMVEPY
	201 250
P10349	${\tt DYYIFGQNYIRPLIDFGNSFVGNLSLFKDIEEKLQQGHNVVLISNHQTEA}$
Q9FEP9	${\tt DYYIFGQNYIRPLIDFGNSFVGNLSLFKDIEEKLQQGHNVVLISNHQTEA}$
Q39639	${\tt DYYTFGQNYVRPLIDFENSFVGNLSLFKDIEEKLHQGHNVVLISNHQTEA}$
Q9FEQ0	${\tt DYYTFGQNYVRPLIDFGNSFVGNPFLFKDIEEKLHQGHNVVLISNHQTEA}$
Q9M4V1	DYYMFGQNYIRPLIDFRRSYIGNISIFSDMEEKLQQGHNIVLMSNHQTEA
SEQ ID NO: 23	${\tt DYYTFGQNYVRPLLDFRNSYLGNLKIFDQIEKNLKEGHNVIFLSNHQTEA}$

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Figure 16 (continued)

	251 300
P10349	DPAIISLLLEKTNPYIAENTIFVAGDRVLADPLCKPFSIGRNLICVYSKK
Q9FEP9	DPAIISLLLEKTNPYIAENTIFVAGDRVLADPLCKPFSIGRNLICVYSKK
Q39639	DPAIISLLLEKTNPYIAENMIYVAGDRVIADPLCKPFSIGRNLICVYSKK
Q9FEQ0	DPAIISLLLEKTSPYIAENMIYVAGDRVIVDPLCKPFSIGRNLICVYSKK
Q9M4V1	DPAIIALLLERTNSHIAETMVFVAGDRVLTDPLCKPFSMGRNLLCVYSKK
SEQ ID NO: 23	DPAVMALLLEHSHPYLAENLTYVAGDRVVLDPFCKPFSMGRNLLCVYSKK
	301 350
P10349	${\tt HMFDIPELTETKRKANTRSLKEMALLLRGGSQLIWIAPSGGRDRPDPSTG}$
Q9FEP9	${\tt HMFDIPELTETKRKANTRSLKEMALLLRGGSQLIWIAPSGGRDRPDPSTG}$
Q39639	${\tt HMLDIPELAETKRKANTRSLKEMALLLRGGSQLIWIAPSGGRDRPDPSTG}$
Q9FEQ0	${\tt HMFDIPELAETKRKANTRSLKEMALLLRGGSQLIWIAPSGGRDRLDPSSG}$
Q9M4V1	HMDDVPELIEMKRRANTRSLKEMALLLRGGSQIIWIAPSGGRDRPDPSTG
SEQ ID NO: 23	HIHDVPDLAEMKIKANAKTLRQMTILLRQGGQYYG
	351 400
P10349	EWYPAPFDASSVDNMRRLIQHSDVPGHLFPLALLCHDIMPPPSQVEIEIG
Q9FEP9	${\tt EWYPAPFDASSVDNMRRLIQHSDVPGHLFPLALLCHDIMPPPSQVEIEIG}$
Q39639	EWYPAPFDASSVDNMRRLLQHSGAPGHLYPLALLCYDIMPPPSQVEIEIG
Q9FEQ0	EWLPAPFDASSMDNMRRLIQHSGVPGHLCPLALLCYDIMPPPSKVEIEIG
Q9M4V1	EWHPAPFDVSSVDNMRRLVEHSSVPGHIYPLSLLCYEVMPPPQQVEKQIG
SEQ ID NO: 23	
	401 450
P10349	EKRVIAFNGAGLSVAPEISFEEIAATHKNPEEVREAYSKALFDSVAMQYN
Q9FEP9	EKRVIAFNGAGLSVAPEISFEEIAATHKNPEEVREAYSKALFDSVAMQYN
Q39639	EKRVISFNGTGLSVGPEISFDEIAASRDNPDEVREAYSKALYDSVAKQYN
Q9FEQ0	EKRVISFNGVGLSLAPAISFEAIAATHRNPDEAREAYSKALFDSVSMQYN
Q9M4V1	ERRTISFHGVGLSVAPELNFNELTAGCETPEEAKEAFSQALYNSVGEQYN
SEQ ID NO: 23	
	451 476
P10349	VLKTAISGKQGLGASTADVSLSQPW.
Q9FEP9	VLKTAISGKQGLGASTADVSLSQPW.
Q39639	VLKAAIDGKQELEASVADVSLSQPWI
Q9FEQ0	VLKAAIYGRQALRASTADVSLSQPWI
Q9M4V1	VLKSAIHEHRGLNASNSIISLSQPWQ
SEQ ID NO: 23	

Figure 17: Alignment of SEQ ID NO: 27 with Swiss Prot database

	1 50
SEQ ID NO: 27	MEGGGSIIALPLGLMFLFSGFFINILQLLSVLFILPFSRRAYRVVNMIMM
Q9XFW4	.MAMAAAVIVPLGILFFISGLVVNLLQAVCYVLVRPMSKNTYRKINRVVA
Q40119	MAIPAAAFIVPISLLFFMSGLVVNFIQAVFYVLVRPISKDTYRRINTLVA
Q9SDN3	
Q41745	MAIPLVLVVLPLGLLFLLSGLIVNAIQAVLFVTIRPFSKSFYRRINRFLA
Q9SYC8	MKIPAALVFIPVGVLFLISGLIVNIIQLVFFIIVRPFSRSLYRRINKNVA
	51 100
SEQ ID NO: 27	EVLWSELIWLLDWWANVKVKVYTPKESWEHLGKEHALLICNHRSDIDWLV
Q9XFW4	ETLWLELVWIVDWWAGVKIQVFADDETFNRMGKEHALVVCNHRSDIDWLV
Q40119	ELLWLELVWVIDWWAGVKVQLYTDTESFRLMGKEHALLICNHRSDIDWLI
Q9SDN3	MGKEHALVISNHRSDIDWLV
Q41745	ELLWLQLVWVVDWWAGVKVQLHADEETYRSMGKEHALIISNHRSDIDWLI
Q9SYC8	ELLWLQLIWLFDWWACIKINLYVDAETLELIGKEHALVLSNHRSDIDWLI
	101 150
SEQ ID NO: 27	GWIIAQRLGCLGGTRAVMKKSTKFLPVIGWSMWFSEYVFLSRDWAKDEKV
Q9XFW4	GWILAQRSGCLGSALAVMKKSSKFLPVIGWSMWFSEYLFLERNWAKDEST
Q40119	GWVLAQRCGCLSSSIAVMKKSSKFLPVIGWSMWFSEYLFLERNWAKDENT
Q9SDN3	GWVLAQRSGCLGSSLAVMKKSSKFLPVIGWSMWFSEYLFLERSWAKDEGT
Q41745	GWILAQRSGCLGSTLAVMKKSSKFLPVIGWSMWFAEYLFLERSWAKDEKT
Q9SYC8	GWVMAQRVGCLGSSLAIMKKEAKYLPIIGWSMWFSDYIFLERSWAKDENT
	151 200
SEQ ID NO: 27	${\tt LKNGYSSLKGFPRTLWVALFVEGTRFTKAKLEAAQKFAADTGLRVPRHVL}$
Q9XFW4	${\tt LQSGLQRLNDFPRPFWLALFVEGTRFTEAKLKAAQEYAASSELPVPRNVL}$
Q40119	${\tt LKSGLQRLNDFPKPFWLALFVEGTRFTKAKLLAAQEYAASAGLPVPRNVL}$
Q9SDN3	${\tt LKSGVQRLKDFPQPFWLALFVEGTRFTQAKLLAAQEYAAATGLPVPRNVL}$
Q41745	${\tt LKWGLQRLKDFPRPFWLALFVEGTRFTPAKLLAAQEYAASQGLPAPRNVL}$
Q9SYC8	LKAGFKRLEDFPMTFWLALFVEGTRFTQEKLEAAQEYASIRSLPSPRNVL
	201 250
SEQ ID NO: 27	VPRTKGFVSAVENLREFVPVVYDMTVAISKELPNPTMIRIFRGQPSVVHV
Q9XFW4	IPRTKGFVSAVSNMRSFVPAIYDMTVAIPKTSPPPTMLRLFKGQPSVVHV
Q40119	IPRTKGFVSAVSNMRSFVPAIYDLTVAIPKTTEQPTMLRLFRGKSSVVHV
Q9SDN3	IPRTKGFVTAVSQMRSFAPAIYDVTVAIPKSSPAPTMLRLFEGRPSVVHV
Q41745	IPRTKGFVSAVSIMRDFVPAIYDTTVIVPKDSPQPTMLRILKGQSSVIHV
Q9SYC8	IPRTKGFVSAVSEIRSFVPAIYDCTLTVHNNQPTPTLLRMFSGQSSEINL

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Figure 17 (continued)

	251 300
SEQ ID NO: 27	${\tt HVRRVPMSDLPEGANAISKWCHDAFHIKDDRLEQHEKENTFGEDLYIPIE}$
Q9XFW4	$\verb HIKCHSMKDLPEPEDEIAQWCRDQFVAKDALLDKHIAADTFPGQKEQNIG $
Q40119	${\tt HLKRHLMKDLPKTDDGVAQWCKDQFISKDALLDKHVAEDTFSGLEVQDIG}$
Q9SDN3	$\verb HIKRHVMRDLPETDEAVAQWCKDIFVAKDALLDKHTVEQTFGDQQLKVTG $
Q41745	${\tt RMKRHAMSEMPKSDEDVSKWCKDIFVAKDALLDKHLATGTFD.EEIRPIG}$
Q9SYC8	${\tt QMRRHKMSELPETDDGIAQWCQDLFITKDAQLEKYFTKDVFSDLEVHQIN}$
	301 350
SEQ ID NO: 27	${\tt RPLKPLIIVISWAITLLAAAWWFLRRVLSTWKGIAWVAGVLVVVMLCV}$
Q9XFW4	${\tt RPIKSLAVVVSWACLLTLGAMKFLHWSNLFSSWKGIALSAFGLGIITLCM}$
Q40119	${\tt RPMKSLVVVVSWMCLLCLGLVKFLQWSALLSSWKGMMITTFVLGIVTVLM}$
Q9SDN3	${\tt RPLKSLLVVTAWACLLILGALKFLYWSSLLSSWKGIAFSALGLGVVTVLM}$
Q41745	${\tt RPVKSLLVTLFWSCLLLFGAIEFFKWTQLLSTWRGVAFTAAGMALVTGVM}$
Q9SYC8	${\tt RPIKPLIVVIIWLGFLVFGGFKLLQWLSIVASWKIILLFVFFLVIATITM}$
	351 391
SEQ ID NO: 27	QILVMSSQSERSSDPAAKKANQKQAASVAHLGKTD
Q9XFW4	QILIRSSQSERSTPAKVAPAKPKDNHQSGPSSQTEVEEKQK
Q40119	HILIRSSQSEHSTPAKTRARQTAENPK
Q9SDN3	${\tt QILIRFSQSERSTPAPVAPTNNKNKGESSGKPEKQQ}.\dots.$
Q41745	HVFIMFSQAERSSSARAARNRVKKE
Q9SYC8	QILIQSSESQRSTPAKRPLQEQLISA

Figure 18: Alignment of SEQ ID NO: 8 with Swiss Prot database

	1 50
SEQ ID NO: 8	MESTADVGMSDDDPILLNGLETPLLAEFPLGERPTIGPEAPVNPFHEPDG
P42322	
O9NKW7	
Q9XFJ4	MGQREDIRTLSNEYEVTDIPRRGGLSVVRRGTRRRTLHSGQHHE
035259	· · · · · · · · · · · · · · · · · · ·
Q9FF57	
QJFF37	
	51 100
SEQ ID NO: 8	GWKTNNEWNYFQMMKSILLIPLLLVRLVSMITIVAFGYVWIRICLIGVTD
P42322	
Q9NKW7	
Q9XFJ4	VVAIKTLR.RFGPPPAPEKKSLNKSRVPQAALISETLLTNELLVMIKIVE
035259	
09FF57	MIEQLGLIIIMGLIHYQSERVKPREWLKLSSSENSR
×22107	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	101 150
SEQ ID NO: 8	PLFKPFNPCRRFMLWGIRLVARAVMFTMGYYYIPIKGKPAHRSEAPIIVS
P42322	
Q9NKW7	
Q9XFJ4	DVSPHPNVIHLYDVCEDPSGVHLILELCSGGELFDRIAGQARYNEEGAAA
035259	FOYISLRLTILWGLGVLIRYCFLLPLRIALAFTGIGLLVVGTTMVGY
Q9FF57	LG.NTKTNHRRSETGDVSYEQRDLLDISPTLTEAAGAIVDFHCFKTCRCF
23110.	
	151 200
SEQ ID NO: 8	${\tt NHIGFLDPIFVFYRHLPAIVSAKENVEMPIIGLFLQALQIIPVDRTDAQS}$
P42322	
Q9NKW7	
Q9XFJ4	VVRQIAKGLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIED
035259	LPNGRFKEFLSKHVHLMCYR
09FF57	TLAFGWIIFLSLFIPVNALLK
	201 250
SEQ ID NO: 8	${\tt RHHAAGNVRRRAVDNMWSHVMLFPQGTTTNGRAIIAFKTGAFSPGLPVQP}$
P42322	
Q9NKW7	
Q9XFJ4	FANPVVGLFGSIDYVSPEALSREKITTKSDIWSLGVILYILLSGYPPFIA
035259	
Q9FF57	

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Figure 18 (continued)

		251 300
SEQ ID NO:	8	MVIRYPHKYVNPSWCDQGGPLVVVLQLMTQFINHMEVEYLPVMKPTVREM
P42322		
Q9NKW7		
Q9XFJ4		PSNRQKQQMILNGQFSFDEKTWKNISSSAKQLISSLLKVDPNMRPTAQEI
035259		ICVR.ALTAIITYHN
Q9FF57		VLVEMICSFFVASWTG
		301 350
SEQ ID NO:	8	KYPHEFASRVRSEMAKALGIVCTEHSFLDIKLALAAEKLKQPSGRSL
P42322		MGTNTSSLRP
Q9NKW7		MGN
Q9XFJ4		LEHPWVTGDLAKQEQMDAEIVSRLQSFNARRKFRAAAMASILSSSFSLRT
035259		RKNRPRNGG
Q9FF57		VVKYHGPRPSIRPKQ
		351 400
SEQ ID NO:	8	${\tt VEFARMEKLFRLDFPTAKEYLEKFSAMDRTHSGFVTFEELCTALDLP.}$
P42322		${\tt EEVEEMQKGTNFTQKEIKKLYKRFKKLDKDGNGTISKDEFLMIPELA.}$
Q9NKW7		${\tt ENSLPMELCSNFDPDEIKRLGKRFRKLDLDNSGSLSVDEFMTLPELQ.}$
Q9XFJ4		KKLKKLVGSYDLKPEELENLSHNFKKICKNGENSTLLEFEEVLKAMEMSS
035259		${\tt ICVANHTSRIDVIIFASDGYYAMVGQVHGGLMGVIQRAMVKACPHVWFE.}$
Q9FF57		${\tt VYVANHTSMIDFIVLEQMTAFAVIMQKHPGWVGLLQSTILESVGCIWFN}.$
		401 450
SEQ ID NO:	8	RSPITKQVFNLFDKDGHGSINFREFLAGLAFVSSHTSFSSTMEAAFKACD
P42322		VNPLVKRVISIFDENGDGSVNFKEFIAALSVFNAQGDKQRKLEFAFKVYD
Q9NKW7		QNPLVQRVIDIFDTDGNGEVDFKEFIEGVSQFSVKGDKLSKLRFAFKIYD
Q9XFJ4		${\tt LVPLAPRIFDLFDNNRDGTVDMREIIGGFSSLKYSQGD.DALRLCFQVYD}$
035259		RSEVKDRHLVAKRLTEHVQDKSKLPILIFPEGTCINNT.SVMMFKKGSFE
Q9FF57		RSEAKDREIVAKKLRDHVQGADSNPLLIFPEGTCVNNN.YTVMFKKGAFE
		451 500
SEQ ID NO:	8	VNGDGTLSRDEVERSLLDIFPELPPITVFKLFDTLDINHDEKIS
P42322		IDGDGYISNGELFTVLKMMVGNNLSD.VQLQQIVDKTILEADEDGDGKIS
Q9NKW7		MDKDGYISNGELFQVLKMMVGNNLKD.TQLQQIVDKTIIHADADGDGKIS
Q9XFJ4		TDRSGCISKEEVESMLRALPEDCLPINITEPGKLDEIFDLMDANSDGKVT
035259		IGATVYPVAIKYDPQFGDAFWNSSKYGMVTYLLRMMTSWAIVCSV
Q9FF57		${\tt LDCTVCPIAIKYNKIFVDAFWNSRKQSFTMHLLQLMTSWAVVCEV}$

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Figure 18 (continued)

			501	550
SEQ ID	NO:	8	WEEFSSFLQRNPEYLAIIIYAHPTLLKPPTSTS	
P42322			FEEFAKTLSHQDLENKMTIRL	
Q9NKW7			FEEFCAVVGNMDVHKKMVVDV	
Q9XFJ4			FDEFKAAMQRDSSLQDVVLSSLRPN	
035259			WYLPPMTREKDEDAVQFANRVKSAIARQEDW	
Q9FF57			WYLEPQTIRPGETGIEFAERVRDMISLRAGLKKVPWDGYLKYSRPSP	KHS
			551 568	
SEQ ID	NO:	8	551 568	
SEQ ID P42322	NO:	8		
~	NO:	8		
P42322	NO:	8		
P42322 Q9NKW7	NO:	8		

Figure 19: Alignment of SEQ ID NO: 10 with Swiss Prot database

	1 50
Q24214	
P28470	
SEO ID NO: 10	MTSTENTAMFTEDTSTLNGSTEANHAEFPLGERPTIGPEPPVNPFHESST
035259	METIMDDEVTKRTSAEEL
Q9XFJ4	MGQREDIRTLSNEYEVTDIPRRGGLSVVRRGTRRRTLHSGQHHEVVAIKT
E	
	51 100
Q24214	
P28470	
SEQ ID NO: 10	WSIPQVIKTILLVPLLVIRLLSMFALMMLGYICVKVAMIGCKDPLFKPFN
035259	ESWNLLSRTNYNFQYISLRLTILWGLGVLIRYCFLLP
Q9XFJ4	LRRFGPPPAPEKKSLNKSRVPQAALISETLLTNELLVMIKIVEDVSPHPN
	101 150
Q24214	
P28470	
SEQ ID NO: 10	PLRRLLLVSVRLIARGVMVAMGYYYILVKGKPAHRSVAPIIVSNHIGFVD
035259	LRIALAFTGIGLLVVGTTMVG
Q9XFJ4	VIHLYDVCEDPSGVHLILELCSGGELFDRIAGQARYNEEGAAAVVRQIAK
22	, <u> </u>
	151 200
Q24214	151 200
Q24214 P28470	
P28470	
P28470 SEQ ID NO: 10	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN
P28470 SEQ ID NO: 10	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG
P28470 SEQ ID NO: 10 035259 Q9XFJ4	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN
P28470 SEQ ID NO: 10 035259 Q9XFJ4	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG 201 250
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 1	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 10 035259	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG 201 250 IRRRAMDNEWPHVMLFPEGTTTNGKALISFKTGAFSPGLPVQPMVIKYPH VHLMCYR.
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 1	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 10 035259	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG 201 250 IRRRAMDNEWPHVMLFPEGTTTNGKALISFKTGAFSPGLPVQPMVIKYPH VHLMCYR.
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 10 035259	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 10 035259 Q9XFJ4	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG 201 250 IRRRAMDNEWPHVMLFPEGTTTNGKALISFKTGAFSPGLPVQPMVIKYPHVHLMCYR. LFGSIDYVSPEALSREKITTKSDIWSLGVILYILLSGYPPFIAPSNRQKQ 251 300
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 10 035259 Q9XFJ4	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG 201 250 IRRRAMDNEWPHVMLFPEGTTTNGKALISFKTGAFSPGLPVQPMVIKYPHVHLMCYR. LFGSIDYVSPEALSREKITTKSDIWSLGVILYILLSGYPPFIAPSNRQKQ 251 300
P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470 SEQ ID NO: 10 035259 Q9XFJ4 Q24214 P28470	PIFVFYRHLPVIVSAKEIVEMPIIGMFLQALQIIPVDRINPASRHHAAGN YLPNGRFKEFLSKH GLEALHGASIVHRDLKPENCLFLNKDENSPLKIMDFGLSSIEDFANPVVG 201 250 IRRRAMDNEWPHVMLFPEGTTTNGKALISFKTGAFSPGLPVQPMVIKYPHVHLMCYR. LFGSIDYVSPEALSREKITTKSDIWSLGVILYILLSGYPPFIAPSNRQKQ 251 300

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Figure 19 (continued)

	301 350
Q24214	MGNETSLPME
P28470	
SEQ ID NO: 10	NRVRTEMAKALGVVCTEHNFLDIKLKMAAEKLKQPSGRSLVEFARME
035259	NRPR
Q9XFJ4	GDLAKQEQMDAEIVSRLQSFNARRKFRAAAMASILSSSFSLRTKKLKKLV
	351 400
Q24214	$\verb MCSNFDADEIRRLGKRFRKLDLDNSGALSVDEFMSLPELQ.QNPLVQR $
P28470	MGTHFDHDEIKRLGRSFKKMDLDKSGSLSVDEFMSLPELQ.QNPLVGR
SEQ ID NO: 10	${\tt KLFRLDYSKAQEYLEKFSAMDPSHSGYVTYDEFLKALHLP.PTQITEQ}$
035259	SRIDVIIFASDGYYAMVGQVHGGLMGVIQRAMVKACPHVW.FERSEVK
Q9XFJ4	${\tt GSYDLKPEELENLSHNFKKICKNGENSTLLEFEEVLKAMEMSSLVPLAPR}$
	401 450
Q24214	${\tt VIDIFDADGNGEVDFKEFIQGVSQFS.VKGDKLSKLRFAFRIYDMDNDGY}$
P28470	${\tt VIDIFDTDGNGEVDFREFIVGTSQFS.VKGDEEQKLRFAFRIYDMDNDGF}$
SEQ ID NO: 10	${\tt VFNLFDKNGHGSINFREFVAGLAFLS.THTSFQTTMKAAFKACDVDGDGT}$
035259	DRHLVAKRLTEHVQDKSKLPILIFPEGTCINNTSVMMFKKGSFEIGATVY
Q9XFJ4	IFDLFDNNRDGTVDMREIIGGFSSLKYSQGDDALRLCFQVYDTDRSGC
	451 500
Q24214	${\tt ISNGELFQVLKMMVGNNLKD.TQLQQIVDKTIGFADKDEDGKISFDEFCS}$
P28470	ISNGELFQVLKMMVGNNLKD.WQLQQLVDKSILVLDKDGDGRISFEEFRD
SEQ ID NO: 10	LTRNEVESSLMAVFPELPPATVLKLFDTLDLNRDGSINWEEFSS
035259	PVAIKYDPQFGDAFWNSSKYGMVTYLLRMMTSWAIVCS
Q9XFJ4	${\tt ISKEEVESMLRALPEDCLPINITEPGKLDEIFDLMDANSDGKVTFDEFKA}$
	501 532
Q24214	VVGNTDIHKKMVVDV
P28470	VVRTMEIHKKLVVFVDHGQED
SEQ ID NO: 10	FLQRNPEYLAIILAAHPTLLQAPKSEESETNI
035259	VWYLPPMTREKDEDAVQFANRVKSAIARQEDW
Q9XFJ4	AMQRDSSLQDVVLSSLRPN

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Figure 20: Alignment of SEQ ID NO: 12 with Swiss Prot database

	1 50
Q9XFW4	. MAMAAAVIVPLGILFFISGLVVNLLQAVCYVLVRPMSKNTYRKINRVVA
Q9SDN3	
Q40119	MAIPAAAFIVPISLLFFMSGLVVNFIQAVFYVLVRPISKDTYRRINTLVA
Q41745	MAIPLVLVVLPLGLLFLLSGLIVNAIQAVLFVTIRPFSKSFYRRINRFLA
Q9SYC8	MKIPAALVFIPVGVLFLISGLIVNIIQLVFFIIVRPFSRSLYRRINKNVA
SEQ ID NO: 12	MIMM
	51 100
Q9XFW4	ETLWLELVWIVDWWAGVKIQVFADDETFNRMGKEHALVVCNHRSDIDWLV
Q9SDN3	MGKEHALVISNHRSDIDWLV
Q40119	ELLWLELVWVIDWWAGVKVQLYTDTESFRLMGKEHALLICNHRSDIDWLI
Q41745	ELLWLQLVWVVDWWAGVKVQLHADEETYRSMGKEHALIISNHRSDIDWLI
Q9SYC8	ELLWLQLIWLFDWWACIKINLYVDAETLELIGKEHALVLSNHRSDIDWLI
SEQ ID NO: 12	EVLWSELIWLLDWWANVKVKVYTPKESWEHLGKEHALLICNHRSDIDWLV
	101 150
Q9XFW4	${\tt GWILAQRSGCLGSALAVMKKSSKFLPVIGWSMWFSEYLFLERNWAKDEST}$
Q9SDN3	${\tt GWVLAQRSGCLGSSLAVMKKSSKFLPVIGWSMWFSEYLFLERSWAKDEGT}$
Q40119	GWVLAQRCGCLSSSIAVMKKSSKFLPVIGWSMWFSEYLFLERNWAKDENT
Q41745	GWILAQRSGCLGSTLAVMKKSSKFLPVIGWSMWFAEYLFLERSWAKDEKT
Q9SYC8	GWVMAQRVGCLGSSLAIMKKEAKYLPIIGWSMWFSDYIFLERSWAKDENT
SEQ ID NO: 12	GWIIAQRLGCLGGTRAVMKKSTKFLPVIGWSMWFSEYVFLSRDWAKDEKV
	200
OOMERIA	151 200
Q9XFW4	LQSGLQRLNDFPRPFWLALFVEGTRFTEAKLKAAQEYAASSELPVPRNVL
Q9SDN3	LKSGVQRLKDFPQPFWLALFVEGTRFTQAKLLAAQEYAAATGLPVPRNVL
Q40119	LKSGLQRLNDFPKPFWLALFVEGTRFTKAKLLAAQEYAASAGLPVPRNVL
Q41745	LKWGLQRLKDFPRPFWLALFVEGTRFTPAKLLAAQEYAASQGLPAPRNVL
Q9SYC8	LKAGFKRLEDFPMTFWLALFVEGTRFTQEKLEAAQEYASIRSLPSPRNVL
SEQ ID NO: 12	LKNGYSSLKGFPRTLWVALFVEGTRFTKAKLEVAQKFAADTGLRVPRYVL
	201 250
Q9XFW4	IPRTKGFVSAVSNMRSFVPAIYDMTVAIPKTSPPPTMLRLFKGQPSVVHV
Q9SDN3	IPRTKGFVTAVSQMRSFAPAIYDVTVAIPKSSPAPTMLRLFEGRPSVVHV
Q40119	IPRTKGFVSAVSNMRSFVPAIYDLTVAIPKTTEQPTMLRLFRGKSSVVHV
Q41745	IPRTKGFVSAVSIMRDFVPAIYDTTVIVPKDSPQPTMLRILKGQSSVIHV
Q9SYC8	IPRTKGFVSAVSEIRSFVPAIYDCTLTVHNNQPTPTLLRMFSGQSSEINL
SEQ ID NO: 12	VPRTKGFVSAVENLREFVPVVYDMTVAISKELPNPTMIRIFRGQPSVVHV

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Figure 20 (continued)

	251 300
Q9XFW4	$\verb HIKCHSMKDLPEPEDEIAQWCRDQFVAKDALLDKHIAADTFPGQKEQNIG $
Q9SDN3	$\verb HIKRHVMRDLPETDEAVAQWCKDIFVAKDALLDKHTVEQTFGDQQLKVTG $
Q40119	${\tt HLKRHLMKDLPKTDDGVAQWCKDQFISKDALLDKHVAEDTFSGLEVQDIG}$
Q41745	${\tt RMKRHAMSEMPKSDEDVSKWCKDIFVAKDALLDKHLATGTFD.EEIRPIG}$
Q9SYC8	${\tt QMRRHKMSELPETDDGIAQWCQDLFITKDAQLEKYFTKDVFSDLEVHQIN}$
SEQ ID NO: 12	${\tt YVRRVPMSDLPEGANAISKWCHDAFHIKDDRLEQHEKENTFGEDLYIPIE}$
	301 350
Q9XFW4	${\tt RPIKSLAVVVSWACLLTLGAMKFLHWSNLFSSWKGIALSAFGLGIITLCM}$
Q9SDN3	${\tt RPLKSLLVVTAWACLLILGALKFLYWSSLLSSWKGIAFSALGLGVVTVLM}$
Q40119	${\tt RPMKSLVVVVSWMCLLCLGLVKFLQWSALLSSWKGMMITTFVLGIVTVLM}$
Q41745	${\tt RPVKSLLVTLFWSCLLLFGAIEFFKWTQLLSTWRGVAFTAAGMALVTGVM}$
Q9SYC8	${\tt RPIKPLIVVIIWLGFLVFGGFKLLQWLSIVASWKIILLFVFFLVIATITM}$
SEQ ID NO: 12	${\tt RPLKPLIIVISWAITLLAAAWWFLRRVLSTWKGIAWVAGVLVVVMLCV}$
	351 391
Q9XFW4	QILIRSSQSERSTPAKVAPAKPKDNHQSGPSSQTEVEEKQK
Q9SDN3	QILIRFSQSERSTPAPVAPTNNKNKGESSGKPEKQQ
Q40119	HILIRSSQSEHSTPAKTRARQTAENPK
Q41745	HVFIMFSQAERSSSARAARNRVKKE
Q9SYC8	QILIQSSESQRSTPAKRPLQEQLISA
SEQ ID NO: 12	QILVMSSQSERSSDPAAKKANQKQAASVAHLGKTD